

ES AF/2708 #12 LB 6/5/01  
**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**



Applicant(s): Roe-Kwan KIM

Examiner: T. Davis

Serial No.: 09/132,351

Group Art Unit: 2681

Filed: August 12, 1998

Docket: 678-154

For: **METHOD FOR TRANSMITTING SHORT  
MESSAGE TO CALLED SUBSCRIBERS**

Dated: May 23, 2001

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Respectfully submitted,

Paul J. Farrell

Reg. No.: 33,494

Attorney for Applicant(s)

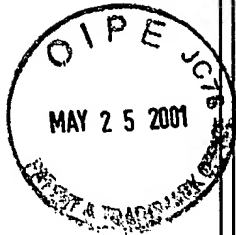
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Dated: May 23, 2001

  
Daniel E. Tierney



Docket: 678-154 (P8378)

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE BEFORE THE  
BOARD OF PATENT APPEALS AND INTERFERENCES**

Applicants: Roe-Kwan KIM

Group Art Unit: 2681

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MESSAGE TO CALLED SUBSCRIBERS**

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Assistant Commissioner for Patents  
Washington, D.C. 20231

Technology Center 2600

**APPEAL BRIEF**

Sir:

**REAL PARTY IN INTEREST**

The real party in interest is Samsung Electronics Co, Ltd, the assignee of the subject application, having an office at 416, Maetan-Dong, Paldal-Gu, Suwon-City, Kyungki-Do, Republic Of Korea.

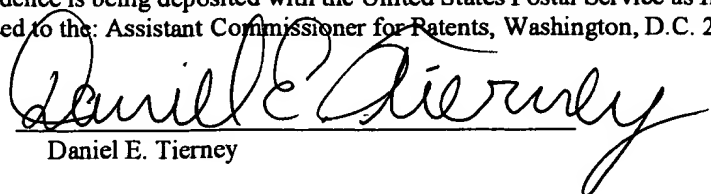
**RELATED APPEALS AND INTERFERENCES**

To the best of Appellant's knowledge and belief, there are no related appeals or interferences.

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## STATUS OF CLAIMS

Of the original Claims 1-14 filed, Claims 1, 2 and 9 were amended in the Amendment mailed September 8, 2000. Thus, Claims 1-14 are pending in the Application. In the Office Actions of June 9, 2000 and November 21, 2000, Claims 11 and 12 were acknowledged as including allowable subject matter. Thus, Claims 1-10, 13 and 14 are the subject of this appeal.

## STATUS OF AMENDMENTS

The above-mentioned amendments to Claims 1, 2 and 9 were previously entered and addressed in the final Office Action of November 21, 2000. A Response Under 37 C.F.R. 1.116 was submitted February 21, 2001, but did not include further amendments to the claims. Thus, the Appendix to this Appeal Brief includes Claims 1, 2 and 9 as amended in the Amendment mailed September 9, 2000 and Claims 3-8 and 10-14 as originally filed.

## SUMMARY OF THE INVENTION

The invention relates generally to transmitting short messages in a mobile communication system. A short message is typically input by a user into a mobile terminal along with a short message service center number and a destination address (a called subscriber). The mobile terminal typically transmits the short message data to a base station (BS) controller, where it is typically routed through a mobile switching center (MSC) to the short message service center identified by the short message

service center number. The short message service center stores the short message information and detects the destination address. The short message service center then transmits the short message to the destination address via the MSC.

The short message is transmitted from the mobile terminal to a single destination address in the above-described manner. If a user of a mobile terminal wants to send the same message to multiple destination addresses, the user must transmit the short message to each destination address one by one. This, of course, is highly inconvenient. Among other things, it can also result in messages being misdirected since the user must input a multitude of data. Also, the composition of the group can change depending on the message to be transmitted, also adding to the complexity of such one by one transmission.

The invention provides a solution for the disadvantages of the conventional short message service. The short message method and system of the invention provide transmission of a short message to a group of select destinations when a user inputs an identifier that designates the group.

Thus, Claim 1, for example, is directed at "[a] method for transmitting a short message to a plurality of subscribers in a mobile communication system". Claim 1 further recites that "a plurality of called subscriber numbers [are registered] in a short message service center of said mobile communication system by associating each of said plurality of called subscriber numbers with a group identifier". It is explicitly recited that "the group identifier [is] a separately defined field". Transmission of the short message to a group of destinations is captured in the recitation "simultaneously transmitting said short message to each of said plurality of called subscriber numbers

by designating said group identifier".

Because the group identifier of Claim 1 "is a separately defined field", it is not connected with the particular attributes of the mobile terminal itself. Accordingly, Claim 1 is consistent with a plurality of different groups of called subscriber numbers each being associated in the short message service center with a separate group identifier. By designating the particular group identifier, the short message may be simultaneously transmitted to each of the subscriber numbers in the particular group selected.

#### ISSUE

Whether Claim 1 is anticipated under 35 U.S.C. §102(e) by U.S. Patent No. 6,026,296 to Sanders, III et al. ("Sanders").

#### GROUPING OF CLAIMS

Claim 1 stands alone. For the purposes of this appeal, Claims 2-10, 13 and 14 stand or fall together with Claim 1.

#### ARGUMENT

Independent Claim 1 was said to be anticipated by Sanders. (See 11/21/00 Office Action, ¶13 (paper no. 7)) Among other things, the Sanders patent is purported to show the "group identifier", where the group identifier is a "separately defined field", as recited in Claim 1. (Id. at pp. 2-3) Sanders, however, is directed at the dispatching of calls or other messages. Thus, Sanders focuses on directing messages originating

from a particular device to a single pre-defined group of recipients. The group of recipients are identified by using the originating device's ID or a target address included in the "call request" information.

Thus, the Sanders patent teaches directing messages to a single pre-defined dispatch group based on a characteristic of the transmitting device.<sup>1</sup> Sanders does not teach a "group identifier" that "is a separately defined field" as recited in Claim 1. As a result, the Sanders device does not accommodate directing a single short message to different groups of called subscriber numbers by designating different group identifiers.

The sections of Sanders cited in the Office Action underscore this distinction: Thus, col. 2, lines 37-65 of Sanders states that "the call request includes an identification (ID) of the originating device and a target address associated with the dispatch controller", "[u]pon receiving the call request, the dispatch controller retrieves dispatch-related information from a database coupled to the dispatch controller based on either the originating device's ID or the target address" and "[t]he dispatch-related information includes a talk group affiliation for the originating communication device". In addition, within col. 10, lines 17-41 it is stated that "The SMS call request includes an ID of the communication device and an address of the dispatch controller" and that "... the dispatch controller utilizes the communication device's ID or a target address of the dispatch controller contained in the SMS call request to determine the communication device's talk group and associated talk group members". Finally, col. 7, lines 4-20 and col. 10, lines 44-52, cited in the Office Action, makes no reference to

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<sup>1</sup> Similarly, where the target address of the dispatch controller is used, a characteristic of a target device determines the dispatch group.

a "group identifier" or like parameter as recited in Claim 1.

The Examiner responded to arguments akin to those presented above by positing that the request information in Sanders "includes an identification of the requesting communication device which is used by the dispatch controller in order to determine the other devices in the talk group" and that, "[t]herefore, the ID of the communication device is what determines the identity of the target group". (11/21/00 Office Action, ¶12) The Examiner further maintained that "this information is a separately defined field because ... the communication device sends its ID in the SMS request and also sends a short message".<sup>2</sup> (Id)

To the extent that it can be understood at all, the Examiner's reasoning defies logic. The ID of the communication device is what it purports to be, namely the ID of the communication device. It cannot be a "group identifier" that "is a separately defined field", as recited in Claim 1, because, as stated, it is the ID of the communication device.<sup>3</sup> Moreover, in using a characteristic of the communication device itself (namely the ID), the Sanders device is limited to a single pre-defined dispatch group. By contrast, by using "a separately defined field" as a "group identifier" in Claim 1, multiple groups may be designated using different group identifiers.

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<sup>2</sup> The arguments of paragraph 12 were repeated in the 3/26/01 Advisory Action. In both cases, lines 17-41 of col. 10 of Sanders were again cited. However, that portion of Sanders only provides further explanation of the how the ID of the communication device (or a target address of the dispatch controller) included in the SMS message is used by the dispatch controller to direct the message to the device's talk group.

Accordingly, Sanders fails to show (at least) the Claim 1 recitations of "associating each of said plurality of called subscriber numbers with a group identifier, the group identifier being a separately defined field" and "simultaneously transmitting said short message to each of said plurality of called subscriber numbers by designating said group identifier". Thus, for at least these reasons, the Examiner fails to demonstrate that Claim 1 is anticipated by Sanders. Thus, Claim 1 is allowable.

As noted, Claims 2-10, 13 and 14 stand or fall together with Claim 1 and are thus also allowable.<sup>4</sup>

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<sup>3</sup> The same reasoning applies to use of a target address of the dispatch controller in determining the talk group.

<sup>4</sup> Independent Claim 9 (which was also rejected as anticipated by Sanders) includes analogous recitation to those recitations of Claim 1 discussed above and may be distinguished from Sanders in like manner. Similarly, independent Claim 2 was rejected as obvious under 35 U.S.C. §103(a) based on Sanders in combination with another patent. (11/21/00 Office Action, ¶5) Independent Claim 2 includes analogous recitation to those aspects of Claim 1 described above and may distinguished from Sanders (and thus the cited combination) in like manner.



## CONCLUSION

Independent Claim 1 is not anticipated by Sanders. Thus Claims 1-10, 13 and 14 are allowable. As noted, there is no issue that Claims 11 and 12 are allowable. Thus, allowance of Claims 1-14 is respectfully requested.

By: \_\_\_\_\_

  
Paul J. Farrell

Reg. No. 33,494

Attorney For Applicant

Dated: May 23, 2001

DILWORTH & BARRESE  
333 Earle Ovington Blvd.  
Uniondale, New York 11553  
(516) 228-8484 (tel)  
(516) 228-8516 (fax)

PJF/DET:sf

APPENDIX  
CLAIMS ON APPEAL

1. A method for transmitting a short message to a plurality of subscribers in a mobile communication system, comprising the steps of:

registering a plurality of called subscriber numbers in a short message service center of said mobile communication system by associating each of said plurality of called subscriber numbers with a group identifier, the group identifier being a separately defined field; and

simultaneously transmitting said short message to each of said plurality of called subscriber numbers by designating said group identifier.

2. In a mobile communication system having a plurality of base station subsystems for demodulating signals received from a plurality of corresponding mobile communication terminals and a mobile switching center, operatively connected to said plurality of base station subsystems, for detecting a short message service center number from said demodulated signals and for switching to a corresponding short message service center through a gateway, said short message service center having a memory, a method for transmitting a short message to a plurality of subscribers, comprising the steps of:

transmitting short message information from one of said mobile communication terminals, said short message information including a group identifier and a short message, the group identifier being a separately defined field;

detecting, by said short message service center, said group identifier from said short message information; and

simultaneously transmitting said short message to subscriber numbers associated with said detected group identifier.

3. The method of claim 2, wherein said step of transmitting said short message information from said mobile communication terminal includes the steps of:

displaying a plurality of menus;

selecting a short message service menu from said plurality of displayed menus;

displaying a first set of sub-menus associated with said short message service menu, said first set of sub-menus including a short message transmission mode and a short message group registration mode sub-menu;

instructing a calling subscriber to input a short message service center number in response to selecting said short message transmission mode sub-menu;

displaying a second set of sub-menus associated with said short message transmission mode, said second set of sub-menus including a group transmission mode and a normal transmission mode sub-menu;

inputting said group identifier and said short message if said group transmission mode is selected; and

transmitting a short message signal including said short message service center number, said group identifier and said short message.

4. The method of claim 3, where in said short message signal is transmitted

by actuating a transmit key of said mobile communication terminal.

5. The method of claim 3, wherein said step of inputting said group identifier and said short message includes the substeps of:

instructing a calling subscriber to input said group identifier;

determining if said group identifier is input;

storing said input group identifier in a memory of said mobile communication terminal;

instructing said calling subscriber to input said short message;

determining if a short message end signal is input; and

storing said short message in said memory of said mobile communication terminal if said short message end signal is input.

6. The method of claim 3, wherein said plurality of menus are displayed by actuating a menu key of said mobile communication terminal.

7. The method of claim 2, wherein said step of detecting said group identifier from said short message information includes the substeps of:

determining if said short message information is received;

determining if said short message information is a group transmission mode or a normal short message mode when said short message information is received;

detecting said short message from said short message information and storing said short message if said short message information is a group transmission mode;

and

detecting said group identifier from said short message information.

8. The method of claim 2, wherein said step of simultaneously transmitting said short message includes the substeps of:

determining if said detected group identifier exists in said memory of said short message service center;

reading from said memory subscriber numbers corresponding to said detected group identifier if the detected group identifier exists in said memory; and

dialing said subscriber numbers read from said memory to transmit said short message thereto.

9. A method for transmitting a short message to a plurality of subscribers in a mobile communication system, comprising the steps of:

transmitting from a mobile communication terminal a short message registration signal including a short message service center number, a group identifier and at least one subscriber number, the group identifier being a separately defined field;

detecting, by a short message service center, said group identifier from said short message registration signal; and

registering said transmitted subscriber numbers in said short message service center in accordance with said detected group identifier.

10. The method of claim 9, wherein said step of transmitting said short

message registration signal comprises the steps of:

- displaying a plurality of menus;
- selecting a short message service menu from said plurality of displayed menus;
- displaying a first set of sub-menus associated with said short message service menu, said first set of sub-menus including a short message transmission mode and a short message group registration mode;
- instructing a calling subscriber to input a short message service center number in response to selecting said short message group registration mode sub-menu;
- inputting said group identifier and said subscriber numbers; and
- transmitting said short message signal including said short message service center number, said group identifier and said subscriber numbers.

11. The method of claim 10, wherein said step of inputting said subscriber numbers includes the steps of:

- inputting a desired subscriber number;
- determining if a subscriber number end key is actuated; and
- instructing a caller to input another desired subscriber number if said subscriber number end key is not actuated.

12. The method of claim 11, wherein said step of transmitting said short message signal includes the steps of:

- determining if a transmit key is actuated when said subscriber number end key is actuated; and

transmitting said short message signal upon actuation of said transmit key.

13. The method of claim 9, further comprising the step of storing said detected group identifier from said short message registration signal.

14. The method of claim 9, wherein said step of registering said transmitted subscriber numbers comprises the steps of:

detecting said transmitted subscriber numbers;

assigning a plurality of addresses corresponding to the detected group identifier; and

storing each of said subscriber numbers in a corresponding one of said assigned addresses.